

REMARKS

In ¶ 4 of the Office Action, claims 1, 5, 14 and 15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,665,098 to Nagarajan. The Applicants traverses this ground of rejection for the following reasons.

It appears to be the Examiner's position that the Nagarajan patent discloses all of the limitations of independent claim 1 except for the limitation that the monitoring process is to be accomplished during a predetermined time period. However, the Applicants respectfully submit that the Examiner has overlooked the causal connection between steps (f) and (g) recited in claim 1.

Step (f) in claim 1 recites the step of monitoring for the occurrence of either of two conditions, namely, a change in the gain or dynamic range settings that has stabilized for a predetermined time or activation of an image capture operation. Step (g) recites that if either of those two conditions are satisfied, the pixel intensity histogram of the further contrast-adjusted version of the image frame is analyzed "to determine the operator-achieved upper and lower grayscale levels". Thus, the analyzing step (g) is only performed if the results of the monitoring step (f) meet either of two conditions. This sequence of events cannot be found in the Nagarajan disclosure.

In the first place, the Applicants note that while the Examiner has diligently cited numerous extracts from the

Nagarajan specification after various recitations of Applicant's claim, on page 4 of the action, the recitation of step (g) is not accompanied by any citation to Nagarajan, which would seem to indicate that no supporting citation could be found. This by itself is enough to defeat the obviousness rejection based on Nagarajan alone, since it is well settled that in order to make a *prima facie* case for obviousness, the cited prior art must disclose each and every claim limitation. The Applicants respectfully submit that Nagarajan contains no statement that a pixel intensity histogram is analyzed. In fact, the word "histogram" appears nowhere in the Nagarajan patent. Thus, the step of analyzing a histogram is completely missing from Nagarajan. Moreover, since the step is missing, it cannot be that such step is performed "if either of said conditions [as recited in step (f) is satisfied".

A second defect in the theory of rejection is the Examiner's assertion that Nagarajan discloses that the user of the digital scanner sets the gain and dynamic range when ABS adjustments are made. There is no basis in Nagarajan for this assertion. Neither the word "gain" nor the words "dynamic range" appear anywhere in the Nagarajan patent. In addition, the Examiner has provided no support for his assertion that "ABS adjustments . . . include setting gain and dynamic range".

Regarding the ABS (autobackground suppression) setting, the Nagarajan patent states:

when making black and white scans of originals with colored or shaded backgrounds, the digital scanner 30 will render the background as halftone. The background may even make the foreground image unreadable. To prevent this, the ABS setting is used to remove the background shading. The different suppression levels provided (e.g. mild, normal, strong and very strong) for background suppression dictates the amount of background that needs to be suppressed [sic].

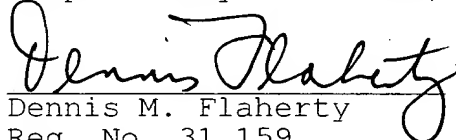
{Nagarajan, col. 5, lines 45-53.} There is nothing in Nagarajan to support the assertion that when the level of background suppression is set, that either or both the gain and dynamic range are set. Moreover, on its face the Examiner's theory of rejection does not fit the language in Applicants' claim 1 because the latter recites second and third control input devices which are used to independently set the gain or the dynamic range. The implication in Nagarajan is that the ABS parameter is set by a single input control device. Therefore, even if gain and dynamic range were both set as a result of the ABS setting (which Applicants vigorously dispute), Applicants' recitation in claim 1 of independently settable control input devices for gain and dynamic range, followed by the recitation of monitoring those two settings independently, does not read on the Nagarajan system.

The same considerations set forth above in support of allowing independent claim 1 are equally applicable to independent claim 14. In view of the foregoing, the Applicants respectfully submit that the obviousness rejection of claims 1, 5, 14 and 15 based on Nagarajan alone should be withdrawn.

In ¶ 5 of the action, claims 11-13 and 18 have been rejected as being obvious over Nagarajan in view of Hull et al. The Applicants traverse this ground of rejection for the same reasons, set forth above, that claims 1 and 14, on which claims 11-13 and 18 depend, are allowable, and also for the same reasons given in Applicants' previous communication in response to the Final Rejection.

In view of the foregoing, Applicants submit that this application is now in condition for allowance. Reconsideration of the application and allowance of claims 1, 5, 11-15, and 18 are hereby requested.

Respectfully submitted,


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August 4, 2005

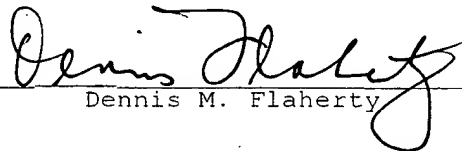
Date

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August 4, 2005

Date


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